

Willingness and availability: Explaining new attitudes toward institutional elder care among Chinese elderly parents and their adult children

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Abstract

This paper studies the attitudes of Chinese elderly parents and their family members toward institutional elder care. Based on a sample survey of 265 elderly residents in 67 elder home institutions and 114 family members, this study finds that elders and family members generally had high evaluations of institutions' quality in terms of facility, medical, and direct care conditions. Elders who reported improved health and emotional well-being after entering institutions gave higher ratings to those institutions' quality. Among adult children, those who had more siblings tended to rate institutions higher than those who had fewer siblings. Factors that influenced elders' willingness to stay in an institution included marital status and financial ability. Widowed elders were more willing to stay in institutions compared with married counterparts. Elders who rated service charge very high preferred to stay at home due to the high cost of institutional care. In the family relatives' sample, gender was found to be related to willingness to place elderly parents in an institution; female children were less willing to place elderly parents in the institution. © 2006 Elsevier Inc. All rights reserved.

1. Background

1.1. Chinese culture and elder care practices

For thousands of years, the Confucian tradition of filial piety or *xiao* has long been the essential ingredient holding together the Chinese familial system of elder care (Gu & Liang, 2000; Ikels, 1993). *Xiao* is a Confucian concept which encompasses a range of requisite behaviors expected of children as regards parents, including respect, obedience, loyalty, material provision, and physical care (Zhan & Montgomery, 2003). Even after the death of parents, children were mandated to make ritual sacrifices in memory of parents and to not change the ways of parents for fear of earning their displeasure. For Western scholars, filial piety has long seemed one of the more attractive as

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well as interesting features of Eastern cultures. Some Western organizations and politicians, including the United Nations, have even proposed that the West should learn from the East in terms of more effective caregiving patterns (Diessenbacher, 1989).

Recent research findings, however, indicate a different pattern of elder care practice is beginning to emerge in China. In urban areas, elders are becoming more and more financially independent. Many expressed the preference to live by themselves or with their spouse instead of living with adult children, if housing and health conditions permit (Xu, 1994). In Baoding, Hebei Province, Whyte (2004) reported that only about 35% of elderly parents were living in extended families with one or more married children (p. 111). In a recent study of urban dwellers in Hunan Province, Zhan and Montgomery (2003) noted that nearly half of elders who needed some levels of assistance in their activities of daily living or instrumental activities of daily living actually lived by themselves instead of living with adult children's families.

In rural China, based on Zhang's (2004) recent research in Hubei Province, elders' preference of separate living arrangement was rapidly increasing in the 1990s. Elders who chose to live alone because of family conflicts reported "their mental state, health, and life in general had improved greatly since they started living separately" (p.74). As more elderly parents choose to live independently, one would wonder if, when becoming physically dependent, they might again choose a new course — to move into an institutional setting.

In China, having multiple children was traditionally viewed as a means for old-age security. After implementation of the one-child policy, multiple children to provide financial and physical care was no longer an option for most families. Recent studies of China's elder care patterns have revealed contradictory results. Some reported that having more children usually meant more financial and physical assistance (Guo & Zhang, 1996), that adult children generally shared caregiving responsibilities at home (Zhan & Montgomery, 2003), and thus elders' needs for outside social support were reduced (Chen & Admachak, 1996). Others found that having multiple children did not translate into greater financial assistance because each adult child simply provided less financial support for their elderly parents (Gui & Ni, 1995; Lee & Xiao, 1998). This led us to the following musings: Would having multiple adult children lessen the willingness of elders to live in elder-care institutions? And would having multiple adult siblings reduce the willingness of adult children to place aging parents in institutions? These questions might even be interesting when applied to many more countries than just China, whether developed or developing. This research will try to shed some light on these questions.

With Chinese baby boomers approaching retirement age, familial elder care is unlikely to meet the needs of all elders. After the one-child policy in place for a generation, tens of millions of retirees will only have one adult child to rely on. This suggests a future inverted pyramid in the majority of urban Chinese families: a married couple of two only children will have to shoulder the care of their own child or children as well as up to 4 or more older parents and sometimes even grandparents. While these only children may not necessarily receive less cultural indoctrination in filial piety, findings suggest that they have expressed lower levels of willingness to sacrifice work for parent care in the future (Zhan, 2004). In addition, they cannot afford to abandon their jobs for the traditional practice of parent care. Further, female children in urban China are gaining increasingly equal access to higher education (Tsui & Rich, 2002). Consequently, the gendered cultural expectation for daughters and daughters-in-law to take care of dependent parents may be expected to change as women become highly educated and career-oriented. If more elders are becoming independent while more caregivers are becoming unavailable, future elders will likely seek alternative means of elder care outside the home. One of the options will be institutional care.

1.2. Chinese institutional care

Studies of Chinese institutional care have been rare, partly because institutional care in China had been very minimal up until social welfare reforms in the 1990s. As Chen (1996) puts it, until recently, Chinese institutional care has constituted a sort of "residual" care for elders who comprise the "Three Nos:" those with no children, no income, and no relatives. Social welfare institutions in many small or medium-sized cities often lump childless elders, mentally ill patients, and orphans together under one-roof (Zhan, 2000). Elders who entered institutional care were stigmatized (Chen, 1996; Shang, 2001).

In 1988, there were only 870 welfare institutions for elders, caring for 46,837 older adults in all of China which already had a population over one billion (Chen, 1996: 115). For elders with no children, the government placed them in an institution and paid for the costs. As for the majority of elders who do have children, no alternatives existed for

their care until very recently; adult children were required by law to take care of aging parents financially, physically, and emotionally.

In line with economic reforms toward decentralization and a market economy, welfare institutions have also experienced dramatic structural changes in the 1990s. The government budget for social welfare services and social relief was reduced from .58% of GDP in 1979 to .19 in 1997 (Shang, 2001: 263). All welfare institutions that were funded by the government prior to the reforms have to become financially self-reliant. Welfare homes are now forced to find their own funding, or “chuangshou (income creation).” Decentralization and reduced government financing have both forced a search for new revenue and opened up opportunities for entrepreneurship in China’s service industry. Although some may still receive partial funding from the government, most have to find their own resources to balance their budgets. These resources include government funding, community funding, business donations, as well as fees paid by individuals and families. As the consequence of the welfare reform, elder care institutions have experienced an unprecedented growth. By now, hundreds and thousands of elder-care services opened for business; most emerged in large cities where elderly population is large in number and proportion.

To provide guidelines and regulations for the rapidly growing social service organizations, in February 2001, the Chinese Civil Affairs Ministry published “Basic Regulations for Social Service Organizations for Elders.” Our original research was an effort to determine how well various social welfare institutions in Tianjin were following these new guidelines, and to analyze institutional and cultural changes in Chinese elder homes. This paper is based on the data drawn from the above research, but the focus is to analyze elder residents and their family members’ attitudinal changes in institutional care.

1.3. Institutional care in Tianjin

Tianjin, which is one of the four autonomous¹ cities in China, registered a population of 9.1 million in 2000. Its total work force was 4.9 million. The average annual salary for employees in Tianjin who worked in state-owned agencies was 12,690 Yuan in 2000. The per capita annual income for all urban households was 8141 Yuan, and the per capita annual expenditure for consumption among urban households² was 6121 Yuan (Tianjin Bureau of Population Statistics, 2001).

In the 1980s, Tianjin became second city, next to Shanghai, in China to experience population aging. In 1985, those 60 and over had reached 1.3 million or 13.9% of the total population. By the end of 2003, those 60 and over had reached 14.5% of the total population (<http://news.enorth.com.cn/system/2004/04/10/000766228.shtml>). Prior to 1988, there had been only two state-owned elder homes in all of Tianjin, mainly serving childless elders. In 1988, two more were built. After welfare reforms in the 1990s, there was a rapid growth of elder care industry. Most private and community-owned elder-care institutions were built after 1998. At the time of this research in 2001, there were 302 registered elder homes.

As elder-homes have multiplied, increasing numbers of elders have been placed in these institutions. Institutional elder care had, until recently, been a foreign concept in China; it has had to compete with the long tradition of filial piety and familial elder care. The sudden shift in practice gave rise to a number of questions: Who are the elders who are moving into these elder-care institutions? Why are they willing to be there? How do they feel about being in the institution? And how is it that family members are now willing to place parents there? These questions intrigued us; and we sought to find some answers in this research.

2. Methods and sites

2.1. Research questions and hypotheses

The central research questions for this study are three: (1) How do elders and their family relatives rate elder home quality? What factors influence elder residents and their relatives’ evaluation of the institution’s quality? (2) Are elderly residents willing to stay in the elder home? What are the factors that influence their decisions to stay in the elder home?

¹ Autonomous cities are municipalities independent of any provincial control. Their administrative and financial functioning is equivalent to a province. Due to their leading roles in industrialization and modernization, they have strong political clout. The three other autonomous cities are: Beijing, Shanghai, and Chong Qing.

² According to the current exchange rate, roughly \$1=8 Yuan. At the current rate, 100 Yuan equals roughly \$12.

Do elders who have more adult children express lower levels of willingness to stay in the institution? (3) Are family relatives willing to keep the elders in the elder care institutions? What are the factors that influence relatives' attitudes towards placing elders in the institution? Do adult children who have more siblings express lower levels of willingness to place elderly parents in an institution? Based on these research questions and China's culture-specific context, four hypotheses were proposed for testing:

Hypothesis 1. Elder residents have a negative view of institutional care. (a) Elders' evaluation of elder home is generally low (because most of them were unwilling to be there). (b) There is a correlation between elders' evaluation of the institution and their level of happiness in the institution. Elders who were unhappy to be there would rate elder home qualities lower. Elders who were happy in the institution would rate its quality higher.

Hypothesis 2. Two major factors influence elders' willingness to stay in the institution: quality of the institution and children's availability. (a) There is a positive relationship between elders' willingness to stay and their general evaluation of the institution; (b) there is a negative relationship between the number of adult children the elder has and the level of willingness to live in an institution: the more children one has, the lower level of willingness one has to live in an institution in old age.

Hypothesis 3. Family relatives have a positive attitude toward institutional care. (a) Family relatives' evaluation of quality of elder home is generally high (because they chose to place their parents or relative in the institution). (b) The more siblings an adult child has, the less likely he/she is to give positive evaluations to the institution. (c) The better the elders' emotional status, the higher the family members' evaluation of the institution's quality.

Hypothesis 4. Family members' willingness to keep the elders in the institution is related to three major factors: (a) their general evaluation of the institution's quality; (b) elders' health and emotional status; and (c) the availability of adult children for direct care. Those who gave high evaluations of elder homes, those who reported their elderly relatives' improved physical and emotional status, and those who reported lower availability are more likely to express higher levels of willingness to place their elderly parents in the institution.

To test these hypotheses, regression analyses were conducted on both elders' and their family relatives' evaluation of elder home quality and on elders' willingness to stay in the elder home and family relatives' willingness to continue to place the elderly parents in the institution. Comparative analyses were also made between elder residents and their family members' evaluation of elder home quality and their expressed willingness to continue the arrangement of institutional care. These analyses were based on sample data collected from survey with 265 elders and 114 relatives in 67 elder-care institutions.

2.2. Sample selection

This research is based on a study in 67 elder homes in Tianjin, China. These homes include government funded welfare institutions, community funded elder-care centers, and privately funded elder homes. Sizes of the institutions ranged from having 6 elders to having over 3 hundred elderly residents. This study invited all 302 elder-care homes, but only 67 institutions responded and expressed willingness to participate. Survey questionnaires were administered with 265 elder residents, 113 family members of the elders, and 67 administrators of the institutions. The focus of this paper will be on the data of elder residents and their family members only.

At each site, the researchers conducted face-to-face survey interviews with elders and family relatives. Interviews with elders were under no supervision of administrative or direct-care staff members. Survey interviews with family relatives were conducted during their visits in the institution, mostly during weekends. Due to Chinese respondents' discomfort with tape-recording, interviews were not video or audio-taped. Research notes and observations were made and recorded as field notes. Further documentary and statistical information was gathered and added in the summer of 2004 in order to update the information.

2.3. Measures

2.3.1. Elder residents sample

Information was collected about elders' characteristics, their family background, self-rated health, and attitudes toward the elder home. Five variables were included in the analysis regarding elders' characteristics: age, gender

(1 = female), educational levels, marital status (widowed = 1, other = 0), and self-rated health status (1 = full assistance needed, 5 = perfectly healthy). Elders' family backgrounds consist of three variables: number of children, living arrangement (1 = living by oneself, 0 = with children), and rating of service charge (1 = very low, 4 = too high). Attitudes towards elder homes consisted of four variables: elders self evaluations of (1) emotional and (2) physical change after entering the institution (1 = much worse than before, 5 = much better than before), (3) elders overall evaluation of institution quality (1 = very bad, 5 = very good), and (4) elders' levels of willingness to stay in the institution (1 = not willing, 4 = willing). Elders' overall evaluation of institution quality was measured by a 3-item composite scale, including facility conditions, quality of direct-care services, and quality of facility medical conditions.

2.3.2. Family relative sample

Information was collected about family members' characteristics, family resources, and attitudes toward institutional elder care. Three variables were included in the analysis regarding family members' demographic characteristics: age, gender (1 = female), and educational levels. Family resource variables included the number of siblings, average family income, and reasons for placement of parents in the institution (1 = busy, 0 = other). Attitudes towards the elder home institution consisted of four variables: family members' evaluations of (1) elders' emotional condition after entering the institution, (2) elders' physical change after entering the institution (1 = much worse than before, 5 = much better than before), and (3) family members' overall evaluation of institution quality (1 = very bad, 5 = very good), and family relative's willingness to place elderly parents in the institution. Family members' overall evaluation of institution quality was measured by a 3-item composite scale, including facility conditions, quality of direct-care services, and facility's medical condition.

2.4. Analysis procedure

Factor analysis was conducted in a varimax rotation to examine the dimensionality of the 3-item composite-scale of elders' and family members' evaluation of elder home quality. Results show that in both samples of the elders and family relatives, these three items uploaded in one dimension; its reliability levels was .70 for elders and .75 for family relatives.

Zero-order correlation analyses was conducted among all variables included in the study (table not included due to space limitation), only theoretically important and statistically significant variables were selected for further analysis. Regression analyses were performed to understand factors influencing elders' and family members' evaluation of the institution's quality and willingness to place elderly parents in the institution. Factors were grouped into three categories, elder/relatives' background, family background, and attitude variables to examine how each group of variables influence their reported attitudes and levels of willingness. In the analysis of elders' and family members' willingness to stay in the institution, elders' evaluation of institution quality was entered as an independent variable.

3. Findings

3.1. Elders' attitude toward elder home institutions

Among 265 surveys conducted with elders residing in the elder home institutions, 125 (47%) were male, 140 female. Residents' age ranged from 44 to 101. The majority (60.7%) of the residents were under age 80; the mean age of all residents in the study was 76.9. More than half of this age cohort (56.6%) had less than elementary education. About three fourth (77%) of the elder residents were widowed. Although 16.6% elders in the elder homes had no children, the vast majority had 3 (62.7%) or more children. Prior to moving into the institution, the majority of elders (54.5%) lived by themselves or with the spouse. Over half (55.8%) of elders explained that their children were not nearby or too busy as the major reason for their moving into the elder home institution. In terms of their financial status, nearly 1/3 (29.6%) had neither pension nor other income. Those who did received an average of 536 Yuan per month, only 23% responded receiving children's financial support ranging from 30 to 800 Yuan per month. With regards to their self-rated health, the majority of the respondents (60.8%) reported either perfectly healthy or had only minor health problems. Twenty percent of the respondents reported needing partial assistance and 11% reported needing full assistance in managing activities of daily living.

Table 1
 Characteristics of elders and family relatives

Variables	Elders (n=265)		Family relatives (n=114)	
	N	%	N	%
Sex				
Male	125	47.2	47	41.2
Female	131	49.4	65	57.2
Missing data	9	3.4	2	1.8
Age				
30–39			19	16.6
40–49			43	37.7
50–59			39	34.2
<59	10	3.8	101	88.6
60–69	40	15.1	7	6.1
70–79	109	41.1	7	6.1
80–89	86	32.5	3	2.6
90 and above	17	6.4		
Missing	3	1.1		
Educational levels				
Lower than elementary school	150	56.6	10	9.1
Middle school	65	24.5	31	28.2
High school	17	6.4	26	23.6
Technical training school	9	3.4	15	13.6
College and beyond college	14	5.3	20	18.2
Missing	10	3.8	4	3.5
Marital status				
Single	15	5.7		
Married	40	15.1		
Widowed	204	77.0		
Divorced	6	2.3		
Individual income or pension ^a				
None	76	28.7		
Less than 250 Yuan	7	2.6	2	1.8
251–499 Yuan	47	17.7	10	8.8
500–999 Yuan	116	43.8	59	51.8
1000–1500 Yuan	11	4.2	33	28.9
1501–2000 Yuan			23	20.2
2000+			11	9.6
Missing	8	3.0	5	4.3
Living arrangements prior to entering the Institution				
Alone or with spouse	134	50.6		
With kids	112	42.3		
Missing	19	7.2		
Self-rated health status				
Full assistance needed	29	10.9		
Some assistance needed	52	19.6		
Pretty healthy	97	36.6		
Missing	23	8.7		
Relationship between family members and elderly residents				
Father			40	36.4
Mother			49	44.5
Father-in-law			2	1.8
Mother-in-law			3	2.6
Grandparents			5	4.5
Other relatives			11	9.6
Reasons for living in the institution				
Childless	63	24.2		
No child nearby or children/we are too busy	148	56.9	77	68.1
Living in the institution makes me/her happier	21	8.1	2	1.8
Institution has better care	6	2.3	3	2.7

Table 1 (continued)

Variables	Elders (n=265)		Family relatives (n=114)	
	N	%	N	%
Housing is too crowded at home	10	3.8	1	.9
Elders want to move into the institution			27	23.9
Other	6	2.3		
Missing data	5	1.9		
Who initiated the move				
Elderly parents themselves	130	49.2	30	26.8
Adult children	41	41.3	27	24.1
Jointed discussed and decided			50	44.6
Other	25	9.5		
Number of children/siblings				
None	70	16.6	3	2.7
1–2	68	25.7	22	20
3–4	89	33.6	47	42.7
5–6	49	18.5	31	28.2
7–8	15	5.7	7	6.4

^a At the current rate, 100 Yuan equals roughly \$12.

When looking at the distribution of elders self-rated emotional and health status after moving into the institution, 67% reported that their physical health was better after moving to the institution; 75.6% reported that they felt better (emotional health) after they had moved into the institution. Among all respondents, 66% expressed preference to living in the institution compared to at home. Elders overall evaluation of the institution quality (3 items) was high, at an average of 4.3 for each item on a 5-point scale where 5=very good. This finding rejects Hypothesis 1a.

Results from regression analysis of elders' evaluation of elder home quality showed that elders' self-related emotional status was related to their evaluation of elder home quality. Elders who reported feeling better after entering the institution gave the institution higher rating. This finding supports Hypothesis 1b. In addition, findings suggest that elders who reported improvement in physical condition also gave institutions higher rating and elders' age was positively associated with their evaluation of elder home quality.

Analysis of elders' level of willingness to live in the institution indicated that elders' evaluation of elder home quality was *not* related to their willingness to stay in the institution. This finding rejects Hypothesis 2a. Having more children was found not related to their lower level of willingness to stay in the institution. Hypothesis 2b is rejected.

Two other factors were related to elders' willingness to stay in the institution: their widowhood and their rating of service charge. Elders who were widowed expressed higher levels of willingness to stay in the institution. Elders who rated service charge to be too high expressed lower levels of willingness to stay in the institution.

3.2. Family members' attitude toward elder-care institutions

Among 114 family members interviewed, over half 66 (58%) were female, 47 (42%) were male. Vast majority (85.5%) of the interviewed family members were adult children and children-in-law. The remaining were grandchildren (4.5%) and other family relatives (10%). Family relatives' age ranged from 31 to 86. The mean age is 46. The majority of the family respondents were adult children (81%). Most of the family members (62.7%) had high school education or higher. Family income ranged from 115 to 4000 Yuan. The majority reported a family income of 1000 Yuan or lower.

Regarding family resource variables, only 2.7% expressed having no other siblings, the vast majority of the respondents (90%) had 2 or more siblings. Among many reasons for placing elderly parents in the institution, being too busy with work accounted for 68% of the answers. Other reasons included elders wanting to move to the institution (24%), crowded housing, elders' severe level of disability, and others (8%). See Table 1 for detail.

Family members' overall evaluation of the institution quality (3 items) was high, on a 4-point scale where 1=not good, 4=very good, family members rated 3.1 for institutions' facility, 3.4 for direct care, and 3.2 for medical condition (see Tables 2 and 3). This finding supports Hypothesis 3a.

Table 2
Regression analyses of elders' evaluation of elder home institution and their willingness to stay (standardized scores)

Variables	Attitude toward elder homes			Willingness to stay			Mean	S.D.
	1	2	3	1	2	3		
Background variables:								
Gender	.017	.021	-.048	.023	.017	-.015	1.49	.50
Age	.152*	.164*	.195**	.079	.077	.098	76.9	9.3
Educational level	-.041	-.050	-.019	-.040	-.029	-.017	1.8	1.2
Widowhood	-.108	-.082	-.059	.188**	.227***	.233**	.85	.36
Self-rated health status	.122	.088	.048	.083	.032	.018	2.8	.96
Family background variables:								
Number of children		.018	-.013		.093	.080	2.94	2.12
Living arrangements		.093	.050		.039	.024	.54	.50
Rating of service charge		-.125	-.066		-.333***	-.313***	2.15	.52
Elders' attitude								
Health status			.253**			-.076	3.89	.79
Emotional status			.232**			.051	4.21	.89
Evaluation toward elder homes						.024	4.33	.74
R ²	.05	.07	.24	.06	.17	.20		
Adjusted R ²	.02	.03	.21	.04	.14	.16		

p*<.10, *p*<.05, ****p*<.01, *****p*<.000.

Note: gender is dummy coded by female=1, male=0. Widowhood is dummy coded by widowed (or single)=1, other (married or remarried)=0. Self-rated health is measured by 1=need full assistance, 4=perfectly healthy. Living arrangement is dummy coded by 1=living alone or with spouse, 0=living with children. Health and emotional statuses are measured by a five-point response set where 1=much worse than before, 5=much better than before. Family financial ability is measured by elders' judgment of elder home cost (1=low, 4=high). Evaluation of elder homes is measured by a five point response set where 1=very bad, 5=very good.

Results from multivariate regression analysis of family members' evaluation of elder home quality showed that family members with more siblings were more likely to give high evaluations of institutions' quality. This finding was contrary to Hypothesis 3b. Elders' emotional status was not found statistically related to their evaluation of institution's quality. Hypothesis 3c is rejected.

Table 3
Regression analyses of family members' evaluation of elder home institutions and their willingness to place elderly parents in the institutions (standardized scores)

Variables	Attitude toward elder homes			Willingness to stay			Mean	S.D.
	1	2	3	1	2	3		
Background variables:								
Gender	-.126	-.136	-.121	-.246*	-.229*	-.248*	.58	.49
Age	-.099	-.197	-.196	-.164	-.148	-.187	46	7.42
Education	.002	.046	.036	.138	.127	.135	3.25	1.46
Family resource variables								
Number of siblings		.317*	.293		.002	.022	3.80	1.7
Average family income		.095	.105		-.046	.019	977	628
Reason for placement		-.15	-.154		.178	.124	.69	.46
Attitudes toward institutional care								
Elders' health status			-.019			.101	3.99	.89
Elders' emotional status			.176			.134	4.1	.90
Evaluation toward elder home						-.188	9.95	1.77
R ²	.03	.14	.17	.11	.14	.20		
Adjusted R ²	-.02	.07	.07	.08	.07	.10		

p*<.10, *p*<.05, ****p*<.01, *****p*<.000.

Note: gender is dummy coded by female=1, male=0. Reason for placement is dummy coded by 1=being too busy, 2=other. Elders' health and emotional statuses are based on family members' observations and ratings of their elderly parents' health status. They are measured by a five-point response set where 1=much worse than before, 5=much better than before.

Regression analysis of family members' level of willingness to place elderly parents in the elder home institution indicated that their evaluation of elder home quality was *not* related to their willingness to continue placing the elderly parents in the institution. Hypothesis 4a is rejected. Elders' health and emotional status were found not related to family relative's willingness to place elders in the institution. Hypothesis 4b was rejected. Unavailability for familial care was not found related to their continued willingness to place elders in the institution. Hypothesis 4c is rejected.

Gender of the family relatives, however, was found related to their willingness. Female relatives, mostly daughters, were less willing to place elderly parents in the institution compared to their male relatives, mostly sons.

3.3. Comparative analysis of family member and elders' attitudes

According to comparative analysis of elders' and family relative's attitudes toward elder care institutions' evaluation, both rated the institutions' quality in facility, direct-care quality, and medical conditions very highly. There was no statistically significant difference found in their evaluation of institutions' quality.

When comparing the willingness for continued institutional care, 72% of elderly residents expressed willingness to continue to live in the institution. In comparison 68% family members expressed continued willingness to place their elderly parents in the institution.

In the reasons for choosing institutional care, over half of the elders (57%) said that their adult children were too busy to provide home care. Nearly half (49%) decided to move to the institution on their own. For adult children, however, 68% listed that their busy work schedule was the main reason for placing parents in the institution. Roughly 28% indicated that elderly parents themselves chose to move into the institution.

4. Discussions

4.1. Dual pressure of work and family

Although this study is exploratory in nature, readers should take caution while interpreting its findings. In particular, population aging in Tianjin may be decades earlier than other parts of the country; attitudes of families and elderly residents toward institutional care may not represent those of elders and family members all over China. Nevertheless, this study sheds light on the future of elder care in China.

Chinese families have known for their long tradition of strong intergenerational relations prescribed by the Confucian doctrines of filial piety. Adult children, particularly daughters-in-law, are expected and have always been the direct caregivers of dependent elderly parents. As China urbanizes, family size is reducing and geographic distance increasing, adult children are becoming increasingly unavailable for direct care at home due to work related responsibilities. Tianjin, being one of the first two rapidly aging cities in China, is currently experiencing dramatic changes at both societal and familial levels. The rapid social changes as the consequences of economic reforms and social reforms are shifting more and more responsibilities on the shoulders of family members. Meanwhile, the decreasing number of children and increasing needs for the care of aging parents are putting the Chinese sandwich generation under both pressures of work and family caregiving. In many cases, adult children have to place both children and physically dependent parents in the institution due to geographic and time constraints despite the long traditions of filial care for aging parents. In fact, in this study, the majority of the elders (56%) expressed that their children's busy work schedule and unavailability for care were the major reasons that they moved into the elder home institution.

Among family relative respondents, daughters and sons were the vast majority (81%). One of the issues that one would wonder is how adult children negotiate and eventually decide on the institutional placement of one's parents. Earlier study findings have indicated that having multiple adult children reduces the elders' need for social support outside the family (Chen & Adamchak, 1996) and adult children tended to share parent care responsibilities at home (Zhan & Montgomery, 2003). Survey result from this study with family members whose elderly parents had already entered an elder-care institution yield yet another dimension of the family dynamics. Although 90% of the family respondents reported having more than two siblings, 68% reported that all siblings were too busy with their work and family responsibilities that they could not take care of their aging parents at home. This new dimension of family reality deserves broad attention in China. As family size will decrease dramatically when Chinese baby-boomers retire and eventually need care, their adult one-child generation will become the sandwich generation under the growing dual pressure of work and family responsibilities.

4.2. Changing attitudes toward institutional care

As shown in the findings, elders' evaluation about elder home quality was high overall. The majority of elder residents expressed a preference to live in an elder home compared to at home. In the analysis of elders' evaluations of elder home quality, a positive relationship was found between elders' self-evaluation of physical and emotional improvement and their rating of elder home quality. Understandably, those elders who reported feeling better in the institutional setting rated elder home qualities higher too.

The finding about the correlation between elders' widowhood and willingness to live in the elder home suggests that widowed elders preferred institutional care setting compared to being left at home, even when they were still physically independent. Quite likely, many of the widowed elders were lonely at home; and some would not have had their children available for adequate care. For elders such as these, living in an elder home improved their physical and emotional well-being. This result echoes findings in a recent national study in China, which indicates greater psychological well-being among elder home resident elders compared to elders who lived at home (Zeng, Liu, Zhang, & Xiao, 2005, p. 282).

Chinese elders' positive attitudes toward institutional care present an obvious contrast for their American counterparts. Elders in the U.S. are found to prefer aging in place (American Association of Retired Persons, 1990; Ball et al., 2004; Lawton, 1990). To understand this difference, one may have to understand the Chinese residential condition. In urban China, most elders live in an apartment of a residential hall. According to the government regulation, residential halls higher than seven floors are required to install elevator (Law 110.com, 1987). To cut cost, most urban residential halls are 6–7 floors in height. Many elders may still be quite healthy and have the ability to manage activities of daily living, however, climbing 2–7 flights of stairs in order to shop and carry daily groceries may deem a major challenge. Many elders may have to move into an institution when adult children are not around to assist with instrumental activities of daily living, such as transportation, shopping, doing light or heavy domestic chores. Other differences, such as lack of adequate care facilities for elders and the disabled (wheelchair, ramp, transportation vehicles) increased elders' dependence on adult children or institutional care.

The finding that elders' rating of service charge was negatively associated with their willingness to stay in the elder home suggests that elders coming from lower income families are most likely to say that the service charges are too high, therefore they may have a hard time to afford institutional elder care now and in the future. It is important to note that elders' rating of service charge was not associated with their evaluation of elder home quality. In other words, elder home residents generally rated elder home quality to be very high regardless of their financial ability. Only when elderly residents felt that the service charge was too high, did they choose to live at home.

4.3. Adult children's willingness to accept institutional care

Even though the majority of the elderly residents (56%) reported having moved into institutions due to adult children's unavailability, nearly half of the elders (49%) claimed to have actually initiated the move themselves — not their adult children. According to elders' family relatives, however, only 28% of the elders actually wanted to move into institutions for whatever reason, including better care and environment in the institution. There is an obvious gap between elders and their family members' reports regarding who actually initiated the move. Is this reporting gap due to elders wanting to "save face" on behalf of their adult children and themselves? Or is it due to the adult children's sense of "guilt" leading them to believe their parents would have preferred to stay at home? This question deserves further research.

As elderly parents are becoming more financially independent, many are making their own choices of institutional care. Adult children, in these cases, did not seem to discourage their parents' from making such a decision. Many adult children might have discussed such issues with their siblings and actually supported their parents' decision for institutional care. According to this study finding, those family members who had more siblings reported better evaluation of institutions' quality of care. Possibly, siblings shared mutual understandings of their busy schedule and jointly decided on finding the best elder-care institutions for their parents.

When it comes to the family members' willingness to continue the placement of elderly parents in institutions, gender had an effect. Daughters expressed lower levels of willingness to place their parents in institutions as a long-term solution. Possibly gendered socialization continues to have an effect on women who have always been taught to believe that it was their duty to physically take care of their parents at home. They probably felt guilty to place their elderly parents in an institution. Had they had a choice they would have preferred to take care of their parents at home.

Even though women may continue to feel obligated to provide parent care, many, if not most, may find it impossible to do so because of conflicting work and care schedules or geographic distance. As more and more women in urban China are gaining equal access to higher education (Tsui & Rich, 2002), it is quite likely that women will become more and more unavailable for parent care. What, then, will be the future options for the traditional pattern of familial elder care in China?

5. Conclusion

Combining findings from comparative analysis of elders' and their family relatives' attitudes toward elder home institutions, we argue that the traditional pattern of filial care for elderly parents at home may be changing. Institutional care is likely to become one of the major alternatives to familial elder care due to both macro- and micro-levels of changes in China. At the macro-level, economic reforms, urbanization, and welfare reforms are forcing more individuals and businesses to be self-sufficient and self-reliant. At the micro-level, families are reducing in size partially due to the one-child policy, yet family members' responsibilities are increasing. These responsibilities include both financial and physical support for family members, young and old. Unfortunately, financial support and physical assistance most often push and pull the sandwich generation in opposing directions. More often than not, the sandwich generation tends to have to work outside the family – and often away from the hometown – to ensure the necessary financial security for the family; consequently, they become more and more unavailable for physical assistance to their family members at home. Many elderly parents end up having to move into an institution. Even though the cultural belief of *xiao* may not necessarily be weakening, one major practice of *xiao* behavior, that of adult children's physical care for parents may be changing due to structural changes in the society and family.

From 1998 to 2001, elder home industry has experienced a dramatic growth; this growth may represent the new trend of attitudinal and institutional change in elder care practices. Contrary to the stereotype that Chinese elders only want to stay at home with adult children, nearly half of the elderly residents (49%) in the elder-care institutions under study actually initiated the move into the institution by themselves. Elderly residents' attitudes toward elder homes were overall positive. The majority actually reported emotional and physical improvements after moving into the elder home. As more and more adult children are becoming geographically unavailable for familial elder care and as family size reduces to having only one adult child in most of the urban families, increasing number of elders are likely to choose to live in an institution rather than at home alone. Financial ability to afford elder home care is likely to be the major factor that influences future elders' decision-making. To meet the different needs of future elder care, greater numbers of elder homes as well as assisted living facilities at different levels in different sizes will be needed. Various kinds of services, such as adult day care, hourly home care, food-delivery services, and house-cleaning services will also assist elders age in place for longer periods of time. Finally, government should provide better guidelines to make residential buildings accessible for disabled or elderly people. Government in Singapore has actually made such a regulation in 1989 (Harrison, 1997, p. 39). Providing barrier-free accessibility in buildings will allow elders to age in place and live independently longer.

5.1. Study limitations

This study is exploratory in nature, readers should take caution while interpreting its findings. In this paper the definition of elder homes is unclear because the actual development of elder care homes encompasses various types of care, such as nursing home, assisted living, and independent living facilities. However, in the early stage of institutional development, this study provides understanding for current situations in elder homes and insights for future development of institutional care in China.

References

- American Association of Retired Persons. (1990). *Understanding senior housing for the 1990*. Washington, D.C.: American Association of Retired Persons.
- Ball, M., Perkins, M. M., Whittington, F. J., Connell, B. R., Hollingsworth, C., King, S. V., et al. (2004). Managing decline in assisted living: The key to aging in place. *Journal of Gerontology: Social Science*, 59B(4), s202–s212.
- Chen, S. Y. (1996). *Social policy of the economic state and community care in Chinese culture: Aging, family, urban change, and the socialist welfare pluralism*. Avebury: Brookfield.

- Chen, Shuo, & Adamchak, D. J. (1996). The effects of filial responsibility expectations on intergenerational exchanges in urban China. *Hallym International Journal of Aging, 1*(2), 58–68.
- Diessenbacher, H. (1989). The generation contract, pension schemes, birth control and economic growth: A European model for the Third World? *Journal of Cross-Cultural Gerontology, 4*, 357–375.
- Gu, S., & Liang, J. (2000). China: Population aging and old age support. In V. L. Bengtson, K. Kim, G. C. Myers, & K. S. Eun (Eds.), *Aging in East and West: Family States, and the elderly* (pp. 59–94). Springer Publishing Company.
- Gui, S. X., & Ni, P. (1995). The “filling” theory of economic support for the elderly. *Population Research, 19*, 10–16.
- Guo, Z., & Zhang, K. D. (1996). Re-testing the role of the number of children in the family support for the elderly. *Population Research, 2*, 7–15 [in Chinese].
- Harrison, J. D. (1997, Winter/Spring). Housing for the aging population of Singapore. *Ageing International, 32–48*.
<http://news.enorth.com.cn/system/2004/04/10/000766228.shtml>
- Ikels, C. (1993). Chinese kinship and the state: Shaping of policy for the elderly. *Annual review of gerontology and geriatrics, Vol. 13* (pp. 123–146).
- Law 110.com. (1987). Regulations on Residential Construction GBJ96-86. Retrieved January, 2, 2004 from <http://www.law.com/guihua/190002.htm>
- Lawton, L. P. (1990). Knowledge resources and gaps in housing the aged. In D. Tilson (Ed.), *Aging in place* (pp. 287–309). Glenview, IL: Scott, Foresman.
- Lee, Yean-Ju, & Xiao, Zhenyu (1998). Children’s support for elderly parents in urban and rural China: Results from a national survey. *Journal of Cross-cultural Gerontology, 13*, 39–62.
- Shang, X. (2001). Moving toward a multi-level and multi-pillar system: Changes in institutional care in two Chinese cities. *Journal of Social Policy, 30*(2), 259–281.
- Tianjin Bureau of Population Statistics. (2001). *Statistical yearbook of Tianjin*. Beijing, China: Publishing Company of China’s Statistics.
- Tsui, Ming, & Rich, Lynne (2002). The only child and educational opportunity for girls in urban China. *Gender and Society, 16*(1), 74–92.
- Qin, Xu (1994). Status quo and problems of old age support by youth and adult within the family. *Sociological Research, 4*, 80–84 [in Chinese].
- Whyte, M. (2004). Filial obligations in Chinese families: Paradoxes in modernization. In C. Ikels (Ed.), *Filial Piety: Practice and discourse in contemporary East Asia* (pp. 106–127). Stanford, California: Stanford University Press.
- Zeng, Yi, Liu, Y. Z., Zhang, C. Y., & Xiao, Z. Y. (2005). *Analysis on determinants of healthy longevity in China*. China: Beijing Gerontological Society.
- Zhan, H. J. (2000). The Inverted Pyramid: The effect of the One-child policy and economic reforms in China. Dissertation at the University of Kansas.
- Zhan, H. J., & Montgomery, R. J. V. (2003). Gender and elder care in China: The influence of filial piety and structural constraints. *Gender and Society, 17*(2), 209–229.
- Zhan, H. J. (2004). Willingness and expectations: Intergenerational differences in attitudes toward filial responsibility in China. *Journal of Marriage and Family Review, 36*(1/2), 175–200.
- Zhang, Hong. (2004). “Living alone” and the rural elderly: Strategy and agency in Post-Mao rural China. In C. Ikels (Ed.), *Filial Piety: Practice and discourse in contemporary East Asia* (pp. 63–87). Stanford, California: Stanford University Press.